ANALYSIS

Edited by Margaret Macdonald, with the advice of A. J. Ayer, R. B. Braithwaite, Herbert Dingle, A. E. Duncan-Jones, C. A. Mace, A. M. MacIver, and H. H. Price

Volume 14

1953–1954

BASIL BLACKWELL · BROAD STREET · OXFORD

CONTENTS

CONTENTS

ol 14 No 1 (New Series No 37) October 1953

Hold for more

ANALYSIS

B

CONTENTS

TWO SHILLINGS AND SIXPENCE NET

BASIL BLACKWELL · BROAD STREET · OXFORD

ANALYSIS 14. 1 OCTOBER 1953

REPORT ON ANALYSIS PROBLEM No. 3

"Does the Logical Truth $(\exists x)(Fx \vee \sim Fx)$ Entail that at Least one Individual Exists?"

By Max Black

ONLY four competitors could face trying to answer this difficult question in six hundred words. All had something interesting to say. Neil Cooper (Oxford) made a good try at defining the meaning of the crucial phrase, "at least one individual exists". His suggestion, "There is in our language at least one individual constant which has a reference" is certainly worth considering, though there are some obvious objections to it. Erna Schneider (Swarthmore) pointed out that the "individual" whose existence is in question might, in some logical systems, prove to be the null class (Cf. F. B. Fitch, *Symbolic Logic*). I wish she had had space to explain what sense she attaches to the "existence of the null class". Richard King (Wisconsin) noticed that the formula cited in the question does not entail the existence of "a physical object, a colour patch, or a feeling of anxiety": it suffers from what Russell used to call "typical ambiguity". But, surely, type indicators could be attached—and in each type (or order) we would seem to be presenting a contingent truth as logically necessary.

I award the non-existent prize to Arnold Kapp (with Neil Cooper not far behind) for stressing the importance of the distinction between the symbolic formula and its supposed equivalent in English. Strawson's discussion of the presuppositions of general statements (*Introduction to Logical Theory*, pp. 173–179) is valuable in this connexion. I would suppose that the "existence of at least one individual" (whatever we take this to mean) is a *presupposition* for the application of *any* theorems of symbolic logic. And that this is just as much the case for tautologies that begin with the existential quantifier as for those that begin with the universal quantifier. I suspect it may be seriously misleading to translate the existential quantifier, in the usual fashion, as "There exists at least one x such that . . . ." We might just as well read it as "Not all x's are such that . . . ." (Similarly. '$\exists x$' can be treated in the calculus itself as a mere abbreviation for '$\sim (x) \sim$' without detriment to any theorems of the calculus). In that case, we should transform '$(\exists x)(Fx \vee \sim Fx)$' into the equivalent form '$\sim (x)(Fx . \sim Fx)$' and read it

as " Not all x's are such that neither Fx nor not Fx "—in which version there need be discerned no existential implications at all. On this view, questions of existence would arise only when we try to apply the calculus by giving definite meanings to such illustrative variables as ' F ' or ' p '. But these are no more than suggestions which need further elaboration.

Cornell University, U.S.A.

DOES THE LOGICAL TRUTH (∃x) (Fx v ~ Fx) ENTAIL THAT AT LEAST ONE INDIVIDUAL EXISTS?

(I)

By ARNOLD KAPP

Consider :

P–1 (∃x) (Fx v ~ Fx)

P–2 There exists at least one individual which is either an F or not an F (where F is any English predicate).

Q–1 At least one individual exists

Q–2 (∃x) (x=x)

R–1 Does the logical truth P–1 entail Q–1?

R–2 Does the logical truth P–1 entail Q–2?

R–3 Does the logical truth P–2 entail Q–1?

The answer to R–1 is a strange (perhaps inappropriate) " no ", for it is improper to speak of an expression in an artificially constructed calculus entailing an expression in the English language. We must first " translate " the symbolic expression into English, or *vice versa*.

We can use Q–2 as the symbolic translation of Q–1. This enables us to ask R–2, the answer to which is *yes*, for both P–1 and Q–2 are theorems of the calculus. There is no problem here.

What about R–3? In ordinary language the rules of analyticity are rules given by *use*. Neither P–2 nor Q–1 are used in everyday discourse, so we cannot be sure if anybody would admit that P–2 is a logical truth (once it was explained to them what is meant by a "logical truth") though I think most people would admit it entailed Q–1.

P–1, on the other hand, is a logical truth only because the logicians have made it so, but there is no accepted convention in the case of P–2. Since P–2 is *not* used we can only arbitrarily decide whether it is a logical truth, in a way in which we cannot *arbitrarily* decide that " all brothers are male " is a logical truth.

A puzzle is felt because we want to deny that Q–1 is *a priori* (for supposedly it is synthetic), but P–1 entails Q–2, which leads us to say that P–1 entails Q–1 (for supposedly Q–1 is the translation of Q–2). But this makes Q–1 a logical truth, which we originally denied in saying it was not *a priori*. The puzzle is dissolved upon seeing that there is no sense to the expression " P–1 entails Q–1 ". When we assert P–1 is a logical truth we do so because of the structure of the calculus. But there is no rigid structure to the language in which P–2 appears; here we must use other criteria.

P–1 can be translated into P–2 *as a logical truth* only if we initially *presuppose* that the only kind of universe in which P–2 is used is a non-empty one (for we presuppose this in a language which makes P–1 a theorem). With this presupposition, P–2 is an *a priori* truth, and it entails Q–1, which is thus also an *a priori* truth, but there is no danger of then considering Q–1 synthetic, because the language is now *restricted* to a non-empty universe.

To sum up: If to say P–1 is a logical truth means merely that it can be proven in the symbolic calculus, we can mechanically test whether it entails '$(\exists x)\ (x=x)$' or any other well-formed sentence of the calculus. But P–1 cannot entail any English expression, *a fortoriori* it cannot entail Q–1.

In the case of P–2, though it would probably entail Q–1, we have no way of establishing whether it is a logical truth, because it has not been given a *use* in ordinary discourse. The only way it can be given a use which makes it logically true is by stipulating that we will use it only when talking about non-empty universes.

University of Chicago.

(II)

By NEIL COOPER

I interpret the sentence "At least one individual exists" as meaning " There is in our language at least one individual constant which has a reference ".

I shall regard " $(\exists x)\ Fx$ " as the defined equivalent of " $Fa \vee Fb \vee Fc \vee \ldots$ ".

Let us take as our specimen language a language L_1 in which, as is indicated by the subscript, there is one and only one individual constant which has a reference, and let this constant be " a ".

Then in L_1,

(1a) $(\exists x)\, Fx. \equiv .Fa$

and

(1b) $(\exists x) \sim Fx. \equiv . \sim Fa$

and thus (2a) $(\exists x)\, Fx \vee (\exists x) \sim Fx. \equiv . Fa \vee \sim Fa$

and therefore

(2b) $\exists(x)\, Fx \vee \sim Fx. \equiv . Fa \vee \sim Fa$

We must now ask whether "$Fa \vee \sim Fa$" entails that at least one individual exists.

In the first place, it is certainly not part of the meaning of "$Fa \vee \sim Fa$" that the constant "a" has a reference, but this is no objection to our saying that "$Fa \vee \sim Fa$" *entails* that at least one individual exists.

Secondly, "$Fa \vee \sim Fa$" *cannot* be true unless the individual constant "a" has a reference, and this is a logical "cannot". It is thus logically impossible for "$Fa \vee \sim Fa$" to be true *and* at the same time for "The constant "a" has a reference" to be false, and therefore "$Fa \vee \sim Fa$" entails that the constant "a" has reference, i.e., that at least one individual exists.

But since in L_1,

(2b) $(\exists x)\, Fx \vee \sim Fx. \equiv . Fa \vee \sim Fa$

it follows that in L_1,

(3) "$(\exists x)\, Fx \vee \sim Fx$" entails that at least one individual exists.

Now if this is true in L_1, it must be true in languages with a larger number of individual constants.

For in L_2

(4) $(\exists x)\, Fx \vee \sim Fx . \equiv . (Fa \vee \sim Fa) \vee (Fb \vee \sim Fb)$

and so on. The expression on the right-hand side of the equivalence sign can only be true if at least one of the individual constants has a reference i.e., if at least one individual exists.

However, we have not shown that "$(\exists x)\, Fx \vee \sim Fx$" is a logical truth. For if "$(\exists x)\, Fx \vee \sim Fx$" were a logical truth, and if our conclusion is accepted, then it is also a logical truth that at least one individual exists. But it is plainly false that this is a logical truth, for we can imagine a world in which no individuals existed, in the sense, at least, which we have given to those words. For if the constant "a" has no reference, then the question of the truth-or-falsity of "$Fa \vee \sim Fa$" does not arise. And thus there is one situation in which it is not true that $Fa \vee \sim Fa$, and therefore "$Fa \vee \sim Fa$" is not a logical truth.

We can, however, make "$Fa \vee \sim Fa$" into a logical truth, if we give a new interpretation to "$\sim Fa$", which will permit it to mean the same as the sentence "Either a has not the prop-

erty F or the constant " a " has no reference ". This can be done in the following way. If " Fa " is true, then "a" has a reference. Then by contraposition if " a " has no reference, then " Fa" is not true. Now if " ~ Fa " may represent " ' Fa ' is not true", then even in the case where in L_1 the constant " a " has no reference, ' Fa v ~ Fa " is true and is hence a necessary truth.

We conclude, then, that while " $(\exists x)$ Fx v ~ Fx " does entail that at least one individual exists, yet " $(\exists x)$ Fx v ~ Fx " may be held to be a logical truth only if we reinterpret the ' ~ ' sign.

Oxford University.

DISPOSITIONS

By STUART HAMPSHIRE

STATEMENTS about dispositions, and descriptions of character, are often said to be, or to involve, hypothetical or quasi-hypothetical statements. This seems to me false.

Examples of forms of sentences normally used to make statements about dispositions are: " X is intelligent ", " X is ambitious ", " X is generous ", " X is honest ", where " X " is replaceable by any expression referring to an individual; these are to be distinguished from expressions of the occurrence (narrative) type, such as " X is angry ", " X is jealous ", " X is embarrassed ", " X is suspicious ", " X understood what you said ". One can convert expressions of the occurrence (narrative) type into dispositional expressions by such devices as: " X is an irascible man," " X is of a jealous disposition ", " X is easily embarrassed ", " X has a suspicious nature ", " X understands English ". Although contexts providing borderline cases can certainly be found, there is an essential difference in the appropriate methods of challenging and confirming the two types of statement; one can distinguish the pure case of a dispositional expression from the pure case of a narrative expression. A statement which refers to a disposition will satisfy all or most of the following overlapping criteria:

(1) It is a statement which summarises what tends to happen or is liable on the whole to happen; and it does not state what happens on a particular occasion, and therefore it is not a proper part of a narrative or story. It could not be entered in a logbook of the day's events opposite some time of the day, or in the annals of someone's life opposite some definite date.

(2) There are short-term and long-term dispositions, but a

disposition cannot come into being, then pass away and then come into being again very rapidly. Character may change suddenly; but it must not change suddenly too often, or it ceases to be character.

(3) A disposition must be manifested and must show itself in actual incidents; there must be at least some cases or instances of it dispersed over some period of time. One cannot normally say that someone is ambitious and generous, while denying that he has ever either acted or calculated in a generous and ambitious manner. In default of actual manifestations, one could only say that he is potentially generous, or that he would be a generous man if circumstances allowed.

(4) The risk of error in description of character is the risk of over-simplification; one may be accused of not having taken account of a variety of incidents which might be quoted as evidence of some contrary disposition. When the truth of a statement about someone's disposition and character is disputed, the final and conclusive argument must be a balancing of one set of actual incidents against another set of actual incidents. It follows that

(5) one can properly claim to know that someone has a certain disposition when (a) one has had occasion for prolonged and continuous observation of the conduct and calculations of the person in question, and (b) when one can quote many incidents in which the disposition manifested itself and can quote virtually no incidents which would count as instances of any contrary disposition. Under such conditions one could say, "He is certainly and indisputably generous"; what is claimed as certain and beyond dispute is that the word "generous" is so far the right word to summarise the general trend or tendency of his conduct and calculations.

(6) There is no necessary connection between disposition and behaviour; one can have a disposition to think in a certain manner and also to react emotionally in a certain manner. Most ordinary character-descriptions refer compendiously to a tendency discernible equally in the behaviour, and in the thought and in the feelings of the subject.

(7) It is characteristic of many words normally used to refer to dispositions, and of expressions which summarise trends and tendencies, that they are not in general polar terms. The denial of any statement of a trend or tendency may be, not an implied assertion of a contrary tendency, but an implied assertion that there is no trend or tendency in either direction. The situation is not like that of the man who is neither short nor tall, but is of

medium height; for the man who is neither ambitious nor not ambitious is not necessarily a man of moderate or normal ambitions. It may be that no sufficiently constant tendency in any direction is discernible in his conduct and calculation; he may be simply erratic and have no settled disposition in this sphere; and, as Aristotle remarked, a disposition must be to some extent a settled disposition.

(8) To attribute a disposition to someone is never to preclude that he may on some occasion act, or have acted, in some way contrary to his general tendency or disposition: that this is always possible is part of the force of calling statements of disposition summarising statements; statements describing what in general tends to happen are in this respect very unlike universal statements. It is typical of human character (as we actually conceive and describe it) that it allows of lapses, and that people sometimes behave in a way which is not in accordance with their character. One may apply dispositional expressions also to material things (" This river tends to overflow its banks " or " The English climate is changeable ".); for one may often choose, or may be compelled by ignorance, to summarise the general character of some physical things, rather than to describe their behaviour in terms of their physical constitution and of the laws which govern the behaviour of objects so constituted.

But such plain categorical statements about tendencies and dispositions should be distinguished from descriptions of the causal properties of things. There is a particular range of expressions referring to the causal properties of things—e.g. " electrically charged ", " magnetised ", " soluble in aqua regia "—which have sometimes been misleadingly called dispositional expressions, and descriptions of human character and disposition have been assimilated to them. The full meaning of such expressions as " electrically charged ", " magnetised ", " soluble in aqua regia " might perhaps in principle be rendered in a set of para-phrasing-sentences of the " if . . . then " form; these paraphrasing-sentences would state that if certain specific operations were performed upon the objects in question, certain specific reactions would be the effects of these operations. There are at least three closely connected grounds for distinguishing the use of expressions which describe the causal properties of things from the use of expressions which describe dispositions. (1) A statement to the effect that some particular thing is soluble in aqua regia plainly does not carry the implication that this particular thing has ever in fact been dissolved in aqua regia. But a statement to the effect that someone is generous

does carry the implication that the person has on occasion actually acted or calculated in a manner which is a manifestation of generosity. (2) The property of being soluble in aqua regia is not a tendency to dissolve which must manifest itself more or less continuously over some period of time; being electrically charged is a property which may be switched on and off. A particular thing may change and change again in this respect, very much as it may change and change again in respect of colour. (3) Such causal properties of things, as being magnetised and being soluble in aqua regia, manifest themselves, if at all, in specific and definitely statable reactions, which can be produced under specific and statable conditions. The incidents which may count as manifestations of human dispositions—of intelligence, ambition, generosity, honesty—are *essentially* various, and these words are essentially vague, summary, interpretative and indeterminate. The way in which statements about character and disposition fit, and fail to fit, the facts is different from the way in which normally specific statements fit, or fail to fit, the facts; the canons of accuracy applied to them are correspondingly different.

When one writes a testimonial, summarising in a few character descriptions the trend of a person's performances, one does not commit oneself to conditional predictions of the form: "if he has such and such opportunities, he will perform in such and such a manner". One provides the *grounds* upon which such a prediction can be based, but one does not, in using the present tense, actually make a prediction. If these specific predictions, based on one's testimonial ("He will, or would, do such and such, since he is an ambitious man".) turn out to be false, it does not *follow* that the character description, originally expressed in the present tense, was false. There are two other possibilities open—either that his character has changed ("He used to be ambitious but he no longer is".); or that on this particular occasion he acted out of character. From the premise "he is a generous man" ("he has a tendency to act generously") one can *infer*, but not *deduce* that, if certain demands were made upon him, he would probably give some money. If one wishes to predict, either conditionally or unconditionally, the future course of a person's conduct, one must use the appropriate grammatical forms, e.g. "he will show himself to be generous if the opportunity comes", or "he will act generously". One may describe someone's character and dispositions as they are, one may state what someone's character used to be, one may predict what it will be, and one may say what it would have been under other

conditions. When one makes a statement about a disposition in the present tense, one is understood to be summarising the trend of someone's behaviour and calculations up to the time of speaking, together with the normal implication that his character is so far continuing the same; the difference between "he is generous" and "he has been generous up to now" is the same as the difference between "his hair is yellow" and "his hair has been yellow up to now".

Observations subsequent to the assertion count as evidence for or against statements of the type "X's hair is yellow", and they count to the same degree as evidence for or against statements of the type "X is intelligent". But from the fact that observations subsequent to the assertion may be relevant as evidence for or against a statement, it does not follow that the statement itself was a prediction.

There is a familiar method of analysis by which almost[1] any normal categorical statement—even a statement to the effect that someone's hair is yellow or that the grass is wet—may be represented as necessarily involving the assertion of a set of conditional predictions; and this method of analysis has been applied to categorical statements about dispositions. One may plausibly re-express almost any categorical statement in the "If . . . then" form by writing into the protasis some favourable conditions for testing the original statement, and making the apodosis roughly equivalent to the original statement, but with the addition of some verb of observation ("look", "feel", "appear", "show", etc.): so for "Jones was in my room at 11 o'clock", one may say "If you, or any normal observer, had come to my room at 11 o'clock, you would have perceived Jones there"; a statement made in the form "The grass is wet" may be said to entail a statement of the form "If any normal observer were to touch the grass, he would feel it to be wet". This method of showing that plain categorical statements necessarily involve conditional predictions may appear successful in every case, provided that some standard conditions of testing the truth of the categorical statement are stated in the protasis, and provided that the apodosis specifies some observations which would count as sufficient evidence of the truth of the categorical statement. The identification of the meaning of a statement with the method of its verification strictly requires this trivialisation of the hypothetical form, since it requires that one should always write into the statement itself the conditions under which it

[1] The only exceptions are statements of the type which show in their grammar and vocabulary that they are made in the most favourable possible conditions of assertion, and therefore do not require evidence and confirmation, i.e. so-called basic propositions.

would be conclusively confirmed. But when I assert that S is P, I do not assert that if such-and-such specific conditions of observation were realised, such-and-such specific evidence that S is P would be obtained. One would only have shown that S is P conveyed a disguised hypothetical statement, if the apodosis of the hypothetical offered as a paraphrase, mentioned specific phenomena not mentioned in S is P, and if the protasis specified the conditions of the occurrence of these phenomena (cf. " magnetised ", " soluble in aqua regia "). But when I say that someone is generous, I do not thereby commit myself to saying that if certain demands were made upon him, he would respond in certain specific ways; and if I do believe this hypothetical statement, I probably believe it *because I believe that he is generous*, that is, as an inference from his generosity. Similarly if I say of someone that he understood what I said, I do not assert that if such-and-such questions were put to him, he would respond in such-and-such a manner; and if I do accept this conditional statement, my grounds for accepting it are that he did understand and *therefore* if . . .

I conclude therefore that statements about human dispositions and character are not, *as such,* hypothetical statements and do not, as such, entail hypothetical statements. The distinction between expressions referring to occurrences (e.g. the occurrence of a state of mind) and expressions referring to dispositions (" he is intelligent ", " he is musical ", " he understands English ") is a distinction *of a different kind* from that between categorical and hypothetical statements. Philosophers may distinguish descriptions of material objects from descriptions of subjective impressions, the discussion of abstractions (Soul, State, Economic Man, Numbers) from the discussion of concrete entities, and similarly one may distinguish narrative statements from character descriptions; but the distinction categorical-hypothetical occurs *within* these varieties of discourse. Distinctions of logic are sometimes confused with these type-distinctions by a play upon the multiple uses of the word 'fact'; for the word 'fact' occurs as one term in a number of different antitheses, some of these antitheses involving logical, and others non-logical, distinctions: fact versus supposition, matter of fact versus matter of opinion, fact versus generalisation, fact versus interpretation, fact versus logical necessity—these are a few of the familiar antitheses in which 'fact' may occur; and no one of these oppositions is reciprocally and necessarily connected with any of the others. If it is true that any statement about character and disposition is a summary and interpretative

statement of a tendency in human behaviour and calculation, it still does not follow that such a statement entails any supposition about how the subject will, or would have, performed or calculated under certain conditions; this consequence will only seem to follow if some *simple* antithesis is supposed between fact-stating statements, taken as a single class on the one hand, and all non-fact-stating statements on the other. But disposition, style in movement and gesture, expression of the face —descriptions of these are no more out of place in categorical and existential statements than are descriptions of the shape of a man's nose or of incidents in his career.

New College, Oxford.

LINGUISTIC MEANING AND ETHICAL UTTERANCES

By DOROTHY WALSH

THE view that the meaning of ethical statements or ethical utterances is either entirely or in part emotive has been asserted. Philosophers, in the course of advocating this view, have cited examples of what they consider to be characteristic ethical utterances. These are usually of the form: "*X* is good", "*X* is bad", "*X* is right", "*X* is wrong", sometimes also "*X* is virtuous", "*X* is wicked". I take it that the claim is that at least part of the linguistic meaning of these utterances is emotive and my intent is to present reasons why I believe that this claim, in so far as it is a claim about linguistic meaning, is unplausible.

In what sense are the utterances in question supposed to be emotive? Wherein lies the emotive element in such utterances? One assertion which has been made is that these utterances directly express emotion. Another assertion which has been made is that these utterances are employed to evoke emotion in listeners or readers. I shall examine these assertions in order.

The claim that utterances such as "*X* is good", "*X* is wrong", are, *as linguistic utterances*, emotionally expressive is unplausible if by this we mean that they are emotionally expressive in the same sense in which the emotionally charged language of poetry or of oratorical eloquence may be said to be emotionally expressive. It is surely a fact of common experience

that the mere circumstance of having an emotion by no means insures that one will be able to achieve an emotionally expressive linguistic articulation. Poetry and eloquence require talent. However, it requires no talent to say "*X* is good". I therefore conclude that if "*X* is good" is supposed to be emotionally expressive it must be so in a sense other than that in which the language of poetry may be emotionally expressive. However, it might be said that even if "*X* is good" does not express emotion in the artistic sense of 'express', it might express it in the sense in which exclamations express. That it to say, it might signalize the presence of emotion. In order to deal with this it will be necessary to offer a few comments on the meanings in use of 'good'.

If we consider the meanings in use of 'good' we can readily discern such differences as good in the sense of *good for*, *good to*, *good as*, but it seems obvious to me that there are at least two other meanings in use of 'good'. One of these is good with the import of virtuous as in "That's a good deed", "That's a good man". I do not see how it can plausibly be denied that this is in fact a meaning in use of 'good' and, in terms of this meaning, 'good' may be said to be a distinctive moral predicate. To be sure one may hold the view that 'good' in this sense is to be interpreted by reference to 'good' in the sense of *good for* or *good to* or *good as* but any such view is a theory and no part of an analysis of meanings in use.

In addition there is 'good' with the import of "good!" Where the exclamation point is considered to be an inseparable part of the total linguistic symbol, "good!" is a *distinctive word* in that it is a positive exclamatory word signalizing a pro-attitude. Now an exclamation has no descriptive meaning and it cannot be predicated of anything. 'Good!' cannot function as a predicate. To be sure there are idiomatic expressions in which "good!" and "bad!" seem to function as predicates but since these linguistic expressions are clearly idiomatic I do not believe they are misleading. To the statement: "Jones will be at the meeting", someone may respond with "That's good!" or with "That's too bad!" In this case we easily understand the meaning to be: "That (the situation of Jones being at the meeting), good!" or "That (the same situation), bad!" But if "*X* is good!" is not a case of this, then "*X* is good!" must be analyzed as follows: "*X* is good (in some predicable sense of "good"), good! (or that's good!)". For example, "*X* is good (virtuous), that's good!" This asserts that *X* has the characteristic of virtue and adds the exclamation signalizing

pro-attitude toward this state of affairs. It is worth noticing that: "*X* is good (virtuous), bad!" is equally intelligible. Why not? If I have some purpose in hand for which I need to bribe *X*, then the recognition that *X* is virtuous suggests that he is not bribable and I might signalize my anti-attitude toward this state of affairs by "bad!" It would be good (useful) if I could bribe *X*, but *X* is good (virtuous) and so not bribable, that's too bad!

Now if "*X* is good" is supposed to be an ethical utterance, it seems plausible to suppose that 'good' is being used as a moral predicate. 'Good,' meaning virtuous, is a moral predicate, but "good!" the exclamation, is certainly not a moral predicate. It is not a predicate at all. Hence we must say either that all moral utterances are exclamations, which is manifestly unplausible, or we must say that moral utterances may be accompanied by exclamations. But, in this latter case, the *linguistic meaning* of the moral utterance may be considered independently of the accompanying exclamation since the same utterance can, in different circumstances, evoke either a positive or a negative exclamation. I therefore conclude that the claim that moral utterances are in themselves emotionally expressive is unplausible.

I shall now consider the assertion that the emotive meaning of ethical utterances lies in the circumstance that such utterances are employed to evoke emotion in listeners or readers. What I wish to argue is that any plausibility attaching to this claim is owing to a confusion of that meaning of 'meaning' which is linguistic meaning with that meaning of 'meaning' which is intent in the employment of a linguistic meaning.

We customarily do not bother to distinguish meaning as linguistic meaning from meaning as intent in the employment of a linguistic meaning. This is the case when (1) the linguistic meaning seems intelligible and (2) we assume that the prime motive for the utterance of the linguistic statement was to convey the linguistic meaning which it contains. However, we raise the question: What do you mean by saying such and such? either when we do not adequately understand the linguistic utterance or when we suspect that the speaker has what may be called an ulterior motive in saying what he says. Suppose one person asks another: "What did he mean by saying he would be at the hotel all morning?" This question is presumably not provoked by puzzlement over the linguistic meaning of such words as "I shall be at the hotel all morning". Nor is it provoked by puzzlement over the circumstance that a

man who wished to convey the information should use these words. The question is a question about ulterior motive and, therefore, a suitable reply might be: "He means that he wants us to let Jones know". Or consider the case in which a man looks out of a window and says: "It's probably going to snow" and in which his wife responds: "You mean you don't want to go out this evening". Or consider the case in which a child around bed-time volunteers the information: "Lots of little boys stay up quite late".

Now meaning as intent is certainly one meaning of 'meaning' and we speak in accordance with conventional English when to a question asking for meaning with reference to a linguistic utterance, we reply with information about what we presume to be the motives which led the speaker to make use of the utterance. However, this makes no sense unless the utterance has, *as linguistic utterance*, its own independent meaning.

It seems to me that the most natural and obvious interpretation of such a question as: "What do you mean by saying that *X* is morally right?" would be either (1) how do you interpret the notion of moral rightness? or (2) what feature of *X* leads you to classify it as a case of moral rightness? This is what is involved in our question when we suppose the speaker to have no ulterior motive. However, the question admits of another interpretation, namely: what was your motive in making use of this linguistic statement? We ask this when we suppose the speaker to have an ulterior motive.

I think we may properly distinguish between an ulterior motive and an additional motive. If I believe that, with reference to a particular moral situation, and as done by a particular moral agent, the act *X* would be morally right, then in saying that it would be morally right my prime purpose is to convey the linguistic meaning of the statement I utter. If I am speaking to the agent in question I may have the additional purpose of recommending the action to him. However, my prime purpose will still be to state what I believe to be the case since it is on the assumption that what I state is the case and because it is the case that I say it to the person concerned. If I were speaking to someone not involved in the moral situation I would still say the same thing although I do not now have the additional purpose of recommending the action to the person to whom I speak. But if a man says that *X* is morally right when he does not believe that any act, under any circumstances, can possess the characteristic, he employs what he must know to be a misleading form of language. Yet he may have a motive in employ-

ing this language such as the motive of wishing to influence the feelings or behaviour of some person. In this case it is appropriate to say that he has an ulterior motive. It seems to me that what some philosophers are asserting is that everyone always has an ulterior motive in making use of ethical utterances. It may well be the case that some people sometimes do, but no empirical claim to the effect that everybody always does seems to me at all plausible.

In conclusion, there are two points I wish to emphasize. The first is that the exclamation "good!" which, as a linguistic symbol, includes the exclamation point as an inseparable part, is a distinctive word. It is a synonym for " hurrah ! " and should not be confused with " good " in any predicable meaning of that word. The second point is that that meaning of ' meaning ' which is linguistic meaning is not the same as that meaning of ' meaning ' which is intent in employing a linguistic meaning. Any claim about people's motives in making use of linguistic meanings must be made on the basis of a wide empirical inquiry. No such claim can be made simply on the basis of the analysis of linguistic meaning.

Smith College U.S.A.

A PROBLEM CONCERNING THE ANALYSIS OF BELIEF SENTENCES

By AVRUM STROLL

IN *Meaning and Necessity*, Professor Carnap says :

> " I wish to emphasize the fact that the discussions in this book about properties, and similarly about relations, concepts in general, propositions, etc., do not involve a hypostatization. As I understand it, a hypostatization or substantialization or reification consists in mistaking as things entities which are not things. Examples of hypostatizations of properties (or ideas, universals, or the like) in this sense are such formulations as ' the ideas have an independent subsistence ', ' they reside in a super-heavenly place ', ' they were in the mind of God before they became manifested in things ', and the like, provided that these formulations are meant literally and not merely as poetical metaphors. (We leave aside here the historical question of whether these hypostatizations are to be attributed to Plato himself or rather to his interpreters.) These formulations, if taken literally, are pseudo-statements, devoid of cognitive content, and therefore neither true nor false. Whatever is said in this book about properties may be wrong, but it has at least cognitive content."[1]

[1] Rudolf Carnap, *Meaning and Necessity*, University of Chicago Press, 1947, p. 22.

I think it is a fair interpretation of the above passage to say that according to Carnap such statements as "the ideas have an independent subsistence", when taken literally, are cognitively meaningless. I think it is also safe to say that many, if not most, analytic philosophers would agree with Carnap. But this creates a problem for such philosophers, since they do recognize that other philosophers, and perhaps even ordinary people, frequently, utter judgments like those mentioned by Carnap, to which they pre-fix the words "I believe that . . ." (e.g., "I believe that God has infinitely many attributes".) The question I wish to discuss in this paper is this: Assuming that such sentences, as Carnap mentions above, when taken literally, are cognitively meaningless, then how are we to analyze affirmative belief sentences like "I believe that p", when "p" is meaningless? I shall restrict the inquiry to affirmative belief sentences, since, when negative belief sentences are considered, difficulties of scope complicate the analysis.[1] It seems to me that there are two plausible interpretations of such affirmative belief sentences. They are:

(1) When "p" is meaningless, then the sentence "I believe that p", is meaningful, but false.

(2) When "p" is meaningless, then the sentence "I believe that p", is meaningless.

It will be noted here that I exclude the possibility that "I believe that p", is true when "p" is meaningless. It may be asked in this connection why anybody would utter a belief sentence, the dependent clause of which is meaningless and, hence, which cannot be true. The answer or answers to this question seem to me to belong to psychology, and I do not offer any here. I simply assume that sometimes belief sentences containing meaningless subsentences are uttered by people, and the problem with respect to such sentences, as I see it, is whether they are false or meaningless.

I

Let me begin with two arguments in favour of the former interpretation, i.e., that the belief sentence is meaningful but false when it contains a meaningless subsentence, as in the above context.

[1] If negative belief sentences, containing a meaningless subsentence are meaningful, then because of ambiguities in scope, they may sometimes be true. For example, the sentence 'A does not believe that p', may be analyzed into: (*a*) 'A stands in the relation to p of neither believing that p, nor disbelieving that p'. This sentence will be true when A's mind is totally blank, for example. (b) On the other hand, if the sentence 'A does not believe that p', is analyzed into, 'A disbelieves that p', then the whole sentence is false, since A cannot disbelieve a meaningless sentence.

Argument A: When " p " is meaningless, it is impossible for me to believe " p ", since I cannot believe a sentence which has no meaningful content. When I say therefore, " I believe that p ", I am making an assertion about my state of mind which is mistaken. I think that I am having a belief (assuming, of course, that I am not lying), but in fact I am not having such a belief. According to this interpretation, therefore, the belief sentence " I believe that p " is significant but false. This interpretation assumes that it is sometimes possible for someone to be mistaken about the relations he has to a given sentence, such as the relation of believing. Such a case may occur when he says that he believes a sentence which, when taken literally, is meaningless. An example of such a belief sentence might be: " Santayana believed that the ideas have an independent subsistence ". According to the interpretation of belief sentences now under consideration, the sentence uttered by Santayana is false, since Santayana could not have believed a sentence which is meaningless, i.e., the sentence " the ideas have an independent subsistence ".[1] The above belief sentence is, of course, to be distinguished from the sentence " Santayana said that he believed that the ideas have an independent subsistence ", which is a true sentence, since Santayana did say this.[2]

Argument B in favour of interpreting such belief sentences as meaningful but false rests upon the acceptance of a heuristic principle about the nature of language. The principle is that we should regard the meaning and the truth of compound sentences, whether extensional or non-extensional, as exhibiting a certain parallelism. The parallelism is that when the truth of a compound sentence is a function of the truth of its constituent sentences, then the significance of the compound sentence will also be a function of the significance of its constituent sentences; and further, when the truth of a compound sentence is not a function of the truth of its constituents, the significance of such a sentence will not be a function of the significance of its constituents either. The following examples will perhaps make the above remarks clearer. Let us consider extensional sentences first. In a compound extensional sentence of logic such as " p and q ", the truth or falsity of " p and q " is a function of the truth or falsity of the sentences it contains. The whole sentence

[1] I am assuming, of course, that the sentence ' the ideas have an independent subsistence ', is meaningless. If someone should object to the assumption, then the problem of analyzing belief sentences containing meaningless subsentences will presumably not arise for him in this case.

[2] The sentence ' Santayana said that he believed that the ideas have an independent subsistence ', is, of course, not a belief sentence, although a belief sentence occurs in it. See Carnap, *Meaning and Necessity*, pp. 47–48, for a discussion of the multiple occurrence of designators within non-extensional contexts.

" p and q " is false if either " p " is false, or if " q " is false, or if both are. It is true only when both " p " and " q " are true. likewise, in the case of extensional sentences, the *significance* of these sentences is a function of the significance of their constituents. We would normally say that " p and q " would not be a significant conjunct, as a conjunct, unless both " p " and " q " were significant.

Now in the case of a non-extensional sentence, such as a belief sentence, the truth or falsity of such a sentence is not a function of the truth or falsity of the subsentence which it contains. Thus, the truth or falsity of " I believe that p ", does not depend on the truth or falsity of " p ". By analogy, then, it seems plausible to hold that the *significance* of " I believe that p ", is not a function of the significance of " p "; just as its truth or falsity is not a function of the truth or falsity of " p ". If the parallelism between the meaningfulness and the truth of belief sentences is accepted, as such a parallelism is ordinarily accepted between the meaningfulness and the truth of extensional sentences, then " I believe that p ", may be meaningful, even if " p " is meaningless. Since by Argument A, " I believe that p ", cannot be true when " p " is meaningless, it follows that if " I believe that p ", is cognitively significant, it must be false.

II

I shall now turn to an argument in favour of the interpretation that when " p " is meaningless, the whole sentence " I believe that p ", is meaningless.

According to this argument, " I believe that p ", is to be treated as a propositional function like " X is even ". If we make the usual distinction between the truth range of the function, and its significance range, we can then raise the question of what the significance range for functions like " I believe that p ", is. A plausible answer is that the values of " p " in such sentences are propositions, and hence that the range of substituents for " p " will consist of the names of propositions (i.e., of sentences expressing propositions). But since, by definition, only significant sentences express propositions, it follows that only significant sentences when substituted for " p " will satisfy the function " I believe that p ", i.e., turn it into a significant sentence. Thus, if a meaningless sentence is substituted for " p ", I believe " that p ", will be meaningless.

The power of this latter argument consists in the fact that it gives rise to an interpretation that is in accord with the usual treatment of sentences containing noun clauses, since such

sentences do appear to contain the name of a proposition following the word " that ", and not the name of a sentence. Thus, to say " I believe ' Snow is white ' " is ordinarily interpreted as an elliptical way of saying " I believe *that* the sentence ' Snow is white ' is true ", or more briefly, " I believe that snow is white ", The constituents of the latter sentences, which follow the word " that ", are again the names of propositions.

III

Although both of these interpretations seem intuitively plausible to me, I am at present inclined to favour the former over the latter. It seems to me that the argument in favour of the interpretation that " I believe that p ", is meaningless, when " p " is meaningless, is unsound, and that other conditions being equal, we should therefore favour the first interpretation. I think the argument is unsound for the following reason :

The usual procedure which is adopted in determining the range of a function is to test various substitutions upon the variable (or variables) in the function in order to see whether or not the replacement of the variable by the substituent turns the function into a significant sentence or not. It is assumed in this process that we know prior to making the substitution upon a given variable whether the resulting sentence will be significant or not. If it is, we say that the substituent " is admissible " and hence is part of the range of the function. In short, we can use the above procedure only when we already know whether the sentences resulting from such substitutions will be significant or not. But in the case of belief sentences, this is precisely what we do not know, since we do not know prior to making substitutions into " I believe that p ", that when " I believe that p ", contains a meaningless subsentence it will itself be meaningless. The fallacy which the argument under discussion commits is that it *assumes* " p " in the above function to be a propositional variable ; but in so doing it begs the question at issue. More properly " p " should be regarded an an unrestricted sentential variable, capable of taking meaningless as well as meaningful substituents. If we so regard it, then the argument stated in Section II can be seen to beg the question.

University of British Columbia.

PRIMENESS AND HETEROLOGICALITY

By J. N. KILLALEA

IN ANALYSIS of March, 1952, Mr. Bowden has attempted to give added credence to Prof. Ryle's view that heterologicality is not an ordinary philological property and that therefore it is improper to ask whether 'heterological' is heterological or not (ANALYSIS, January, 1951), by maintaining that primeness is not an ordinary *number* property. I am concerned to show that we cannot accept Mr. Bowden's analysis, and that it could not therefore be evidence for Mr. Ryle's thesis.

I

Mr. Bowden contrasts "three is odd" with "three is prime", in order to exhibit, in the face of their grammatical similarity, a difference in their logics. This difference is that two things can have the property of primeness only when there are other properties which they do not share, and that this is not the case with 'odd'. Mr. Bowden says that certain fallacies arise from not observing this difference.

Fallacy A. A foreigner is told that "five is not divisible by two"[1] follows from "five is odd" and that "seven is not divisible by two" follows from "seven is odd"; from "three is odd", he would correctly infer "three is not divisible by two". When told that "five is divisible only by five", follows from "five is prime", and also that three is prime, he would probably infer that three is divisible only by five. Mr. Bowden assigns this fallacy to the assumption that since five and three are both prime, they have a common property which is that of being divisible only by five, since this is the property occurring in the place analogous to . . . "is not divisible by two". To say "five is prime", Mr. Bowden continues, "amounts to saying that five is divisible only by five (and not by three), whereas to say 'three is prime' amounts to saying that three is divisible only by three (and not by five)." (p. . 78). We must therefore face the fact that to say "five is prime" is not to say the same thing about five as "three is prime" says about three.

Fallacy B. The part of Fallacy A concerning "odd" and ". . . is not divisible by two" is assumed, stated now as an assumption that any statement of the latter form follows a statement of the

[1] By 'divisible' meaning 'divisible exactly'. I follow Mr. Bowden's exclusion, for convenience, of 1 from the divisors; numbers are the integers. Cf. his paper, footnote 2.

I wish to thank Mr. D. Sachs for several helpful suggestions.

former (where ' . . . ' is filled in both places by the same numeral). Similarly, from anything of the form ". . . is prime" we proceed to " . . . is divisible only by itself " (again, one numeral filling both blanks). Then, the foreigner supposes that " five is divisible only by itself " says the same thing about five as " three is divisible only by itself " says about three. The basis of this supposition is the belief that " itself " refers to the same thing in the two statements, but this is incorrect.

Let us deal with Fallacy B first. No-one denies that " itself " refers to different things in the two statements. What Mr. Bowden fails to prove is that any fallacy occurs when we ascribe a common property to three and five on the basis of the two statements containing " itself ". A foreigner could be in error here only if he supposed that " itself " refers to any one thing, but he would suppose this no more than he would suppose that " only " referred to any one thing. Since he is dealing in a purely formal way with the statements (*ex hypothesi*, he cannot deal with them in any other way), he would not make an assumption about the possible referent(s) of " itself ". As far as Mr. Bowden's argument is concerned then, no fallacy is involved in " Fallacy " B.

Fallacy A appears more substantial but is still open to objections. First, while Mr. Bowden allows the foreigner two examples (five, seven) of correct inference about " odd " before putting him to the acid test (three), he gives him only one example of correct inference about " prime " (five). If our foreigner were given a second correct example, that from " eleven is prime " follows " eleven is divisible only by eleven ", would he infer from " three is prime " to " three is divisible only by five " ? I think not. Mr. Bowden urges us to recognize that we are not saying the same thing about three and five when we say " five is prime " and " three is prime ". How, then, do we determine when two statements are saying the same thing about two things? One (and perhaps the optimum) case occurs when we can abstract the "things," from the statements in which they appear; and if the resultant (unambiguous) fragment is the same in both cases, we conclude that the " same thing " is being said about each. I conclude that the same thing is being said here about five and three.

Perhaps I have failed to dissipate Mr. Bowden's puzzlement, which arises from five's being prime *partly because* it is not divisible by three and three's being prime *partly because* it is not divisible by five. We should have to be puzzled equally, then, by the following cases. When x and y are (different)

mothers, this is so "partly because" they have different children. When x and y are (different) multiples of three, this is so "partly because" the result of dividing by three is different in the two cases. Indeed, if Mr. Bowden means by "partly because" the same as "necessary condition", then for any two (different) numbers to be odd, one necessary condition is that there be a property not in common. That is to say, five and seven are odd partly because five is less than seven and seven is not less than five. Mr. Bowden's puzzle arises from a disregard of the force of the principle of identity of indiscernibles according to which any two different things which have a given property in common must fail to have some other property in common.

We may now turn to Mr. Bowden's distinction between ordinary and extra-ordinary properties. The former are (in arithmetic) such ones as being divisible (or not) by two, by three, etc. Then if numbers x and y have an extra-ordinary property in common, there are ordinary ones which they do and ordinary ones which they do not have in common. We have seen, however, that "odd" would be an extra-ordinary property under his criterion; and since it was set up to distinguish between "odd" and "prime", the criterion has failed to do what it was designed to do.

II

Supposing he has demonstrated the difference between two arithmetical properties, Mr. Bowden goes on by analogous reasoning to generalize about heterologicality. Just as three and five are prime "partly because" each has a property which the other lacks, "'un-hyphenated' and 'hyphenated' both have the property of being heterological partly because the one has and the other lacks an ordinary philological property, namely that of being un-hyphenated". (p. 80). Thus, heterologicality is an extra-ordinary philological property, as primeness is an extraordinary numerical property.

I have already given reasons for doubting the validity of this kind of argument. Mr. Bowden employs a variant:

> 'An epithet is heterological if it lacks the property for which it stands. Given that the statement "'un-hyphenated' is a word containing a hyphen" follows from "'un-hyphenated' is heterological", to infer "'monosyllabic' is a word containing a hyphen" from the statement "'monosyllabic' is heterological" is to assume, tacitly, . . . that ". . . lacks the property for which it stands" mentions an ordinary philological property . . ." (p. 80).

The mention of the definition of ' heterological ' (first line of quote) makes it seem that its *use* is unnecessary. When we take account of the definition (and where E is any epithet), the two inferences are rather as follows :

(1) ' E ' is heterological if, and only if, ' E ' is not E.
(2) ' un-hyphenated ' is heterological.
therefore,
(3) ' un-hyphenated ' is not un-hyphenated (hence, hyphenated).
(1') ' E ' is heterological if, and only if, ' E ' is not E.
(2') ' monosyllabic ' is heterological.
therefore clearly not (3) but
(3') ' monosyllabic ' is not-monosyllabic.

We cannot get from (2) alone to (3), nor from (2') alone to (3').

In the last part of Mr. Bowden's paper we find what I take to be a logical characterization of ' ordinary ' and ' extra-ordinary'. Roughly paraphrased, it runs as follows: a statement like " two is prime " is exponible by statements like " two is divisible by two ", " two is not divisible by four ", etc. Each of these contains a fragment such as " . . . is divisible by two ", which will be called ' primitive epithet '.[1] Then,

" symbolically, if ' a ' and ' b' are of the same logical type, e.g. numerals or philological epithets and ' Ψ ' is primitive epithet, then an ordinary epithet ' Θ ' is characterised by the fact that, if

$$\Theta(a) \equiv \Psi(a) \quad . \quad . \quad . \quad (1)$$

is true, then

$$\Theta(b) \equiv \Psi(b) \quad . \quad . \quad . \quad (2)$$

is true also, whereas if ' Θ ' is an extra-ordinary epithet it is characterised by the fact that if (1) holds (2) need not hold. . . Clearly ' prime ' and ' heterological ' are extra-ordinary property epithets . . . " (p. 81).

This offers little that was not contained in the earlier exposition. The characterization still fails to separate ' odd ' from ' prime ' as Mr. Bowden thinks it does; for we have already seen that five and seven are odd partly because five is less than seven and seven is not less than five. Where ' Θ ' is ' odd ', then, (2) need not hold when (1) does. Finally, if to say that " two is prime " is exponible by certain statements is to say that it is reducible to them, this seems to be flatly wrong.

Mr. Bowden concludes by noting that the paradox of heterologicality depends on employing (twice) the contradictory supposition that the property for which ' heterological ' stands can be both ordinary and extra-ordinary. Mr. Bowden does begin one sentence with " Since an epithet cannot be both an

[1] Not to be confused with another usage, in which the primitive *is* the presupposed. Also, it is not clear, from the varied uses of ' property ' and ' epithet ', whether Mr. Bowden thinks that ' ordinary ' and ' extra-ordinary ' can be applied indifferently to either.

ordinary and an extra-ordinary epithet . . . " (p. 81), but he fails to support the statement. When the distinction is made clear, such a statement might become meaningful. It may be remarked that, if it were also *true*, then there is no need to show that ' heterological ' is a certain one of the pair (that is, that it is extra-ordinary), but only that it is an *epithet*; then, since it is an epithet which is used both ordinarily and extra-ordinarily, the argument for the paradox would be contradictory.

I have held that ' odd ' shares with ' prime ' the characteristics attributed by Mr. Bowden to the latter only; that the fallacies which he supposes to arise from ignoring these ' unique ' characteristics of ' prime ' are not fallacies at all; consequently that, if dissolving the paradox of heterologicality depends on Mr. Bowden's analysis, the paradox has not yet been dissolved. Whether Prof. Ryle has succeeded in this is another question.

San Francisco, California, U.S.A.

PROF. BLACK ON SAYING AND DISBELIEVING

By RICHARD WILLIS

IN his article "Saying and Disbelieving" (ANALYSIS, December 1952) Prof. Black asks the question, " If Thomas were to say ' Mushrooms are poisonous but I don't believe it,' would he be contradicting himself? He criticises Moore's theory, which he takes as typical of previous answers to this problem, by pointing out that there could not possibly be a situation in which such an utterance would be sensible, although Moore spoke as if there could be. Moore held that to say " p " *implies* that the speaker believes p, in the sense that " people, in general, do not make a positive assertion, unless they do not believe that the opposite is true ". Prof. Black points out that such an explanation is inadequate, because in this sense of " imply " to assert e.g. " I am going to have my dress lengthened " implies that the speaker is a woman. Situations, however, are imaginable in which a man might use this sentence sensibly and truthfully. No situation, though, is conceivable in which any one could sensibly say " Mushrooms are poisonous, but I don't believe it." Such an utterance, provided we take the words at their face value, would in all circumstances be pointless, even though it might be true or false.

Prof. Black has here pointed out a real difficulty and his criticism of Moore seems entirely justified. His own theory, however, unless I have quite misunderstood it, misses the point.

" I think we can see," he says, " why the form of words, ' Oysters are edible, but I don't believe it ', is always improper. When the words ' Oysters are edible ' are pronounced assertively, the tone of voice used, together with the choice of the appropriate copula (' are ', not ' may be ', or ' conceivably might be ' or one of the other alternatives available) is a *conventional sign* of what we might call ' good faith '. In order to use the English language correctly, one has to learn that to pronounce the sentence ' Oysters are edible ' in a certain tone of voice is to represent oneself as knowing, or believing, or at least not disbelieving what is being said ".

This theory seems to imply that when we teach some one to use an assertive sentence in a language we might proceed somewhat as follows : " Use the sentence ' the cat is asleep ' whenever (*a*) the cat is asleep, (*b*) you do not disbelieve that the cat is asleep". But in fact this is not really what happens at all. Once we have prescribed condition (*a*), it is unnecessary to prescribe condition (*b*). If you follow rule (*a*), you will automatically follow rule (*b*). Rule (*a*), in a peculiar and crucial sense of " imply ", implies rule (*b*). Similarly, in a peculiar and crucial sense of " self-contradictory ", it would be self-contradictory to say, " use the sentence S whenever (*a*) p is the case, (*b*) you disbelieve p ".

Prof. Black seems to think that the second rule for the use of a sentence (i.e. " do not use it if you disbelieve it ") is just an extra linguistic convention which happens to be there. Actually a language consisting entirely of rules of the form, " use S whenever (*a*) p is the case, (*b*) you disbelieve p ", would be impossible. In a sense it would be possible to obey such rules. But this would be a queer sense of " obey ". One could only " obey " them by accident, since *ex hypothesi* one could never recognise the situation in which it would be proper to apply the rules. *Ex hypothesi* in any such situation one would believe the situation to be other than it was.

This probably leaves much more to be said ; but my aim has been to criticise Prof. Black's theory, rather than to produce a rival theory of my own.

To sum up Prof. Black speaks as though the " signification " of sentences were a rule for their use which has to be learned in addition to learning their meaning. Actually to give the meaning of a sentence is *ipso facto* to give its " signification ". The one implies the other in a crucial sense of " imply " which Prof. Black should have analysed but did not.

The Queen's College, Oxford.

MR. HARTNACK ON EXPERIENCE

By ALAN WHITE

Mr. J. Hartnack's remarks (*Analysis* 13.5) on the queer way in which philosophers use the word 'experience' seem to me so good that I feel it is important to suggest that his own solution goes seriously awry. This stems from the initial mistake (p. 119) that "what I see is not the book but the fact that there is a book on the top of the table". Now while we do say either "I see a book there" or "I see that there is a book there", we do not say "I see the *fact* that . . .". Similarly while it may be correct[1] to say that 'seeing' is a 'finding out', and that "to describe what we see is simply to say or write down that which we have found out" (p. 119), it is not correct that "to experience [or] to find out something is to assert something" (p. 120). This view is at least trebly mistaken (1) it confuses the fact and the statement of the fact, (2) to find out A does not entail making any assertion, certainly not asserting A, (3) 'finding' is an achievement, while 'asserting' is a performance. And therefore it is not correct that an "experience is a judgement, an assertion" (p. 120), nor that an experience could be called true or false.

In view of Mr. Hartnack's correct concluding statement that "to *describe* experiences . . . is to express the things I have found out" (my italics), I am inclined to think that I must have seriously misinterpreted his other remarks; but I cannot see how.

University College, Hull.

[1] cp. Ryle, *Concept of Mind.*